UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,714	09/07/2000	Masaaki Satou	Q60692	2128

7590 12/16/2004	EXAMINER
Sughrue Mion Zinn MacPeak & Seas PLLC	POLLACK, MELVIN H

ART UNIT	PAPER NUMBER
2145	

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DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/656,714	SATOU, MASAAKI
	Examiner	Art Unit
	Melvin H Pollack	2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 September 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>07 September 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: *see attached office action*.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 9/24/04 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-12 have been considered but are moot in

view of the new ground(s) of rejection.

3.   In the response to the last office action, the applicant changed the scope of the claims by

adding "monitoring over a period of time" to all independent claims. The examiner

acknowledges that no new matter has been added by this amendment.

4.   For this office action, the examiner will be modify the original rejection by combining

Shobu and Baugher to handle the case of perpetual monitoring. Thus, the old rejection is

replaced.

5.   In response to applicant's argument that the references fail to show certain features of

applicant's invention, it is noted that the features upon which applicant relies (i.e., "a plurality of

clients") are not recited in the rejected claim(s). Although the claims are interpreted in light of

the specification, limitations from the specification are not read into the claims. See *In re Van

Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The applicant uses a plurality of

clients as part of a definition of the server embodiment, but the claims clearly are drawn to "one

or more terminal devices" connected to "one or more digital service units." Therefore, the claims as drawn may have only one client.

6.   As stated in the Webster Online Dictionary (remarks section of RCE, P. 10, footnote), a server is "a computer in a network that is used to provide services (and data) to other computers in the network." In the art, however, a computer may act as a server in some situations and as a client in others, and therefore does not take a "central computer" role per se. In this case, Shobu teaches that data is transmitted between a calling terminal and a called terminal in response to requests and connection setup (col. 3, line 35 – col. 4, line 40). In other words, Shobu clearly describes a client-server interaction for that particular activity, and therefore fulfills the definition described in the quoted dictionary definition. That is, the calling terminal provides a service to the called terminal over a network, and therefore the calling terminal is a server and the called terminal is a client.

7.   The examiner maintains the rejection that Shobu discloses monitoring means, but agrees that Shobu does not expressly disclose the method of monitoring over a period of time. As such, a secondary reference teaching this item in detail has been added.

8.   In response to the issue regarding the phrases "functionally equivalent" or "would be obvious," in a 102 setting, the examiner notes that he did not use such phrases during the 102(b) rejection. The examiner does use them in the response to arguments section (P. 3, Paragraph 4) solely to discuss the background of notification messages, and did not intend the aspect to become part of the actual rejection (P. 4, Paragraph 5) that Shobu did indeed expressly disclose the notification method.

9.   Regarding the issue of "announcing a data transmission time" and "determining

allowance and non-allowance" Shobu clearly teaches these through the handling of SETUP and

CONN messages, of which the announcement and determination are clearly present (col. 3, line

35 – col. 5, line 15, esp. col. 4, lines 30-45).

Claim Rejections - 35 USC § 112

10.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

11.   Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

12.   Where applicant acts as his or her own lexicographer to specifically define a term of a

claim contrary to its ordinary meaning, the written description must clearly redefine the claim

term and set forth the uncommon definition so as to put one reasonably skilled in the art on

notice that the applicant intended to so redefine that claim term. *Process Control Corp. v.

HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term

"time zone" in claims 2, 3, 6, 8, 9, and 12 is used by the claim to mean "a period of time", while

the accepted meaning is "a set of locations within the same time zone." The term is indefinite

because the specification does not clearly redefine the term.

13.   To explain further, a time zone is a location set, i.e. Eastern Time Zone, Pacific Time

Zone, etc. As the claims stand, this means that a server in DC might send data over the B-

channel, while a server in San Francisco might not. Based upon some specification clues,

especially those indicating the possibility of a server moving from a non-acceptable time zone to

an acceptable time zone, the examiner assumes for the sake of this office action that the applicant

means a time set, i.e. that the server may transmit at 10 AM but not 6 PM. The examiner

requests clarification on this matter.

14.   The term "corresponding one or at least two digital service units" in claims 1, 6, 7, and 12

is a relative term which renders the claim indefinite. The term "one or at least two" is not

defined by the claim, the specification does not provide a standard for ascertaining the requisite

degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the

invention. The problem is that there are two ranges from which to choose from, leading to

indefiniteness in regards to the embodiment. The applicant should consider substituting this

phrase with either "corresponding one or more units" or "corresponding at least one unit".

15.   Claims 2-5 and 8-11 inherit this deficiency.

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

17.   Claims 1, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shobu et al.

(5,692,130) in view of Baugher et al. (5,701,465).

18.   For claim 1, Shobu teaches a server-client type system (abstract; col. 1, line 5 – col. 2,

line 40) in which a terminal device on a client side (Fig. 4, Called Terminal) is connected to a

server (Fig. 4, Calling Terminal) through an ISDN network (Fig. 1; Fig. 4) and corresponding

one or at least two digital service units (Fig. 9), wherein

    a.   Said server comprises:

        i.   Notification means for notifying, when a large volume of data to be

transmitted whose volume is not less than a predetermined value is generated, to

said terminal device as a transmission destination to the effect that the large

volume of data is to be transmitted by the D-channel packet exchange (col. 3,

lines 43-55; col. 4, lines 42-64); and

        ii.   Transmission means for, after the reception of a data transmission timing

signal from said terminal device, starting transmission of said large volume of

data using a B-channel to cause the terminal device to download the large volume

of data (col. 6, lines 15-41), and

    b.   Said terminal device comprises:

        iii.   Monitoring means for monitoring a state of a free B-channel line of all

ISDN communication devices on the client side connected to said digital service

unit to which the terminal device in question is connected upon receiving said

notification of transmission of the large volume of data from said server (col. 5,

lines 58-67); and

        iv.   Transmission allowance notifying means for notifying said server of said

data transmission timing signal by the D-channel packet exchange at timing not

preventing use of a B-channel line with the help of said monitoring means (col. 6,

lines 1-4).

19.   Shobu does not expressly disclose that the monitoring means monitors, over a period of time, a state of a free B-channel line. Shobu does disclose some uses that show that such monitoring may be part of certain embodiments (col. 7, line 5 – col. 8, line 25, esp. col. 8, lines 13-20). Baugher teaches a method (abstract; col. 1, line 5 – col. 2, line 67) for providing resource reservation (col. 1, lines 29-31; col. 6, lines 4-45) for a client-server network (Fig. 2; col. 1, lines 35-65; col. 2, lines 5-10; col. 4, lines 10-20) in an ISDN network (col. 4, line 27) in which the network is clearly monitored over a period of time in order to handle QoS activities (col. 9, line 45 – col. 11, line 40). At the time the invention was made, one of ordinary skill in the art would have used a Baugher real-time monitoring system is Shobu in order to ensure quality of service within the system (col. 1, lines 29-31)

20.   Claim 7 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 1. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 1 is rejected, then claim 7 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.

21.   Claims 2, 3, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shobu and Baugher as applied to claims 1, 7 above, and further in view of Yoshida (5,594,867).

22.   For claim 2, Shobu does not expressly disclose that said terminal device comprises time zone determination means for determining, upon receiving said notification of transmission of the large volume of data from said server, whether the reception time is within a B-channel use-allowed time zone or not and when within the B-channel use-allowed time zone, transmitting said data transmission timing signal to said server. Yoshida teaches a data communication

apparatus (abstract; col. 1, line 5 – col. 2, line 30) which transmits in accordance with a reception

time zone or a terminal from which data has been received. Furthermore, Yoshida teaches

wherein said terminal device comprises time zone determination means for determining, whether

the reception time is within a use-allowed time zone or not (col. 6, lines 18-50). At the time the

invention was made, one of ordinary skill in the art would have used Yoshida's time zone

method in Shobu in order to control data access through pre-existing conditions (col. 2, lines 10-

25).

23.   For claim 3, Shobu teaches wherein said terminal device will, if the time when said

notification of transmission of the large volume of data is received from said server is, upon a

lapse of a first predetermined time with the B-channels of all the ISDN communication devices

connected to said digital service unit to which the terminal device in question is connected being

all free, notifies said server of a transmission allowance to cause the server to transmit said large

volume of data, and if the time when said notification of transmission of the large volume of data

is received from said server is not within said B-channel use-allowed time zone and at that time,

a part of the B-channels of all the ISDN communication devices connected to said digital service

unit to which the terminal device in question is connected are free, notifies said server of a

transmission non-allowance to cause the server receiving the transmission non-allowance to

again notify said terminal device to the effect that large volume of data is to be transmitted by the

D-channel packet exchange upon a lapse of a second predetermined time (see above). However,

Shobu does not expressly disclose wherein notification is within a use-allowed time zone.

Yoshida teaches wherein said terminal device comprises time zone determination means for

determining, whether the reception time is within a use-allowed time zone or not (col. 6, lines

18-50). At the time the invention was made, one of ordinary skill in the art would have used

Yoshida's time zone method in Shobu in order to control data access through pre-existing

conditions (col. 2, lines 10-25).

24.   Claims 8 and 9 are drawn to a method that effectively describes the activities undertaken

by the hardware system as drawn in claims 2 and 3, respectively. It is well known in the art that

the underlying method of a given system is functionally equivalent to said system. Therefore,

since claims 2 and 3 are rejected, then claims 8 and 9 are also rejected for the reasons above. A

teaching regarding the method/system equivalence is available upon request.

25.   Claims 4, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shobu,

Baugher, and Yoshida as applied to claims 1, 3, 7, 9 above, and further in view of Gregory

(5,909,673).

26.   For claim 4, Shobu, Baugher and Yoshida fail to expressly disclose that said terminal

device conducts calling to said server for downloading in place of said transmission allowance

notification. Gregory teaches a method (abstract) of data processing systems (col. 1, line 1 – col.

7, line 35) with this limitation (col. 6, lines 23-40). At the time the invention was made, one of

ordinary skill in the art would have added this form of downloading to ensure that the client

receives the proper elements from the server (col. 3, lines 59-63).

27.   Claim 10 is drawn to a method that effectively describes the activities undertaken by the

hardware system as drawn in claim 4. It is well known in the art that the underlying method of a

given system is functionally equivalent to said system. Therefore, since claim 4 is rejected, then

claim 10 is also rejected for the reasons above. A teaching regarding the method/system

equivalence is available upon request.

28.   Claims 5, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shobu and

Baugher as applied to claims 1, 7 above, and further in view of Gregory (5,909,673).

29.   For claim 5, Shobu teaches that if there is at least one free B-channel line among all the

ISDN communication devices connected to said digital service unit to which the terminal device

in question is connected when the terminal device receives said notification of transmission of

the large volume of data from said server (col. 3, lines 56-67). Shobu des not expressly disclose

that said terminal device conducts calling to said server for downloading, as shown above.

Gregory teaches this limitation (col. 6, lines 23-40). At the time the invention was made, one of

ordinary skill in the art would have added this form of downloading to ensure that the client

receives the proper elements from the server (col. 3, lines 59-63).

30.   Claim 11 is drawn to a method that effectively describes the activities undertaken by the

hardware system as drawn in claim 5. It is well known in the art that the underlying method of a

given system is functionally equivalent to said system. Therefore, since claim 5 is rejected, then

claim 11 is also rejected for the reasons above. A teaching regarding the method/system

equivalence is available upon request.

31.   Claims 6, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shobu,

Baugher, and further in view of Corrigan et al. (5,966,636).

32.   For claim 6, Shobu teaches a server-client type system in which at least one terminal

device on a client side is connected to a server through an ISDN network and corresponding one

or at least two digital service units (see above), wherein

       a.   Said server comprises:

           i.   Notification means for notifying, when a large volume of data to be

transmitted whose volume is not less than a predetermined value is generated, to

said terminal device as a transmission destination to the effect that the large

volume of data is to be transmitted together with a necessary data transmission

time by the D-channel packet exchange (col. 3, lines 43-55; col. 4, lines 42-64);

and

           ii.   Transmission means for, after the reception of a data transmission

allowance signal from said terminal device, starting transmission of said large

volume of data using a B-channel to cause the terminal device to download the

large volume of data (col. 5, lines 58-67), and

       b.   Said terminal device comprises:

           iii.   Announcement means for, upon receiving said notification of transmission

of the large volume of data, announcing said data transmission time to authorize a

user to determine allowance/non-allowance of transmission (col. 6, lines 15-41);

and

           iv.   Transmission allowance notifying means for notifying said transmission

allowance signal by the D-channel packet exchange through operation of said user

based on the announcement of said announcement means (col. 6, lines 1-4).

33.   Shobu does not expressly disclose notification with the data transmission time applied

from said server, i.e. a necessary data transmission time. Corrigan teaches a method (abstract)

for multiple access over randomized slots with collision detection in a cable telephony system

(col. 1, lines 1-40), in which a necessary data transmission time is utilized (col. 1, lines 11-30).

At the time the invention was made, one of ordinary skill in the art would have used a Corrigan

transmission time in Shobu in order to increase the number of users that may operate on the

system (col. 1, lines 19-21).

34.   Claim 12 is drawn to a method that effectively describes the activities undertaken by the

hardware system as drawn in claim 6. It is well known in the art that the underlying method of a

given system is functionally equivalent to said system. Therefore, since claim 6 is rejected, then

claim 12 is also rejected for the reasons above. A teaching regarding the method/system

equivalence is available upon request.

Conclusion

35.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Melvin H Pollack whose telephone number is (571) 272-3887.

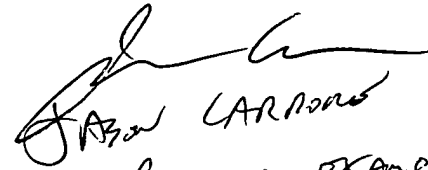The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jack Harvey can be reached on (571) 272-3896. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP
06 December 2004